

Express Mail No. EV074976575US Date of Deposit: May 21, 2002

Please type a plus sign (+) in this box +

PTO/SB (12-97)
Approved for use through 9/30/00. OMB 0631-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless is displays a valid OMB control number.

Modified Form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

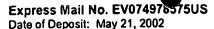
(use as many sheets as necessary)

Application Number	10/087,684		
Filing Date	03/01/02		
First Named Inventor	Edinger		
Group Art Unit	Not Yot Assigned 1653		
Examiner Name	Not Yet Assigned		
Attorney Docket Number	21402-214 CIP		

U.S. PATENT DOCUMENTS							
Exam Initials	Cite No.	U.S. Patent Document No.	Issue Date	Name of Patentee(s) or Applicant(s)	Class	Sub Class	Filing Date If Appropriate

			FOREIGN PATENT DOCUMENTS		
Exam Initials	Cite No.	Foreign Patent Document Office Number	Name of Patentee(s) or Applicant(s)	Date of Publication	Translation Yes No

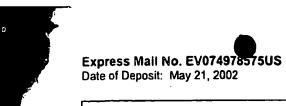
		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS				
Exam Initials	Cite No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.				
\supset	C1°	Alderborn, et al. (2000). Genome Res 10(8): 1249-58.				
	C2*	Ardini, et al. (2000). "Expression of protein tyrosine phosphatase alpha (RPTPalpha) in human breast cancer correlates with low tumor grade, and inhibits tumor cell growth in vitro and in vivo." Oncogene 19(43): 4979-87.				
	C3*	Augustine, et al. (1993). "Antisense attenuation of Wnt-1 and Wnt-3a expression in whole embryo culture reveals roles for these genes in craniofacial, spinal cord, and cardiac morphogenesis." Dev Genet 14(6): 500-20.				
	C4*	Berndt, et al. (1999). "Expression of the transmembrane protein tyrosine phosphatase RPTPalpha in human oral squamous cell carcinoma." Histochem Cell Biol 111(5): 399-403.				
	C5*	Bocchinfuso, et al. (1999). "A mouse mammary tumor virus-Wnt-1 transgene induces mammary gland hyperplasia and tumorigenesis in mice lacking estrogen receptor-alpha." <i>Cancer Res</i> 59(8): 1869-76.				
	C6°	Braisted, et al. (2000). "Netrin-1 promotes thalamic axon growth and is required for proper development of the thalamocortical projection." <i>J Neurosci</i> 20(15): 5792-801.				
	C7*	Brisken, et al. (2000). "Essential function of Wnt-4 in mammary gland development downstream of progesterone signaling." Genes Dev 14(6): 650-4.				
	C8.	Daniel, et al. (1994). "Mammalian alpha-mannosidasesmultiple forms but a common purpose?" Glycobiology 4(5): 551-66.				
	C9.	Dubiel, W., K. Ferrell, et al. (1992). "Subunit 4 of the 26 S protease is a member of a novel eukaryotic ATPase family." J Biol Chem 267(32): 22699-702.				
	C10°	Ellezam, et al. (2001). "Expression of netrin-1 and its receptors DCC and UNC-5H2 after axotomy and during regeneration of adult rat retinal ganglion cells." Exp Neurol 168(1): 105-15.				
	C11*	Feighner (1999). "Mechanism of action of antidepressant medications." <i>J Clin Psychiatry</i> 60(Suppl 4): 4-13.				
	C12*	Ferry and McGaugh (2000). *Role of amygdala norepinephrine in mediating stress hormone regulation of memory storage.* Acta Pharmacol Sin 21(6): 481-93.				
	C13*	GenBank Accession Number: A44468 (02-JUN-2000)				
3	C14*	GenBank Accession Number: A49502 (24-APR-1998)				





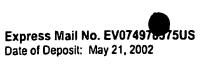
OTHER PRIOR ART MONROUNT LITERATURE DOCUMENTS Cite Exam Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc. No. pattals C15* GenBank Accession Number: A53791 (11-JUN-1999) C161 GenBank Accession Number: AAF21809 (01-JAN-2000) C17* GenBank Accession Number: AAF45755 (04-OCT-2000) C18* GenBank Accession Number: AAF45998 (04-OCT-2000) C19* GenBank Accession Number: AAF53837 (04-OCT-2000) C20° GenBank Accession Number: AAH01280 (12-JUL-2001) C21° GenBank Accession Number: AAH08983 (12-JUL-2001) GenBank Accession Number: AAH16253 (05-NOV-2001) C22* C23* GenBank Accession Number: AAH16368 (05-NOV-2001) C24* GenBank Accession Number: AAK13590 (01-MAR-2001) C25* GenBank Accession Number: AAK82958 (02-AUG-2001) C26* GenBank Accession Number: AB004816 (24-APR-1998) C27* GenBank Accession Number: AB018348 (16-JUN-1999) C28* GenBank Accession Number: AB024080 (08-DEC-2000) C29* GenBank Accession Number: AB063483 (20-OCT-2001) C30* GenBank Accession Number: AE003423 (04-OCT-2000) C31' GenBank Accession Number: AE003663 (04-OCT-2000) C32* GenBank Accession Number: AF008551 (07-APR-1998) C33* GenBank Accession Number: AF031168 (22-JAN-1998) C34* GenBank Accession Number: AF044414 (27-OCT-1999) C35* GenBank Accession Number: AF063249 (09-SEP-1998) C36* GenBank Accession Number: AF095154 (15-OCT-1998) C37* GenBank Accession Number: AF096286 (01-JAN-2000) C38* GenBank Accession Number: AF154413 (01-MAR-2001) C39* GenBank Accession Number: AF233450 (02-AUG-2001) C40° GenBank Accession Number: Al255192 (Nov 12 1998) C41* GenBank Accession Number: AL005132 (18-SEP-1997) C42° GenBank Accession Number: BAA25784 (24-APR-1998) C43° GenBank Accession Number: BAA83743 (08-DEC-2000) C44° GenBank Accession Number: BAB23831 (19-JAN-2002) C45° GenBank Accession Number: BAB70499 (20-OCT-2001) GenBank Accession Number: BC001280 (12-JUL-2001) C47* GenBank Accession Number: BC016368 (05-NOV-2001) C48* GenBank Accession Number: D86948 (31-MAR-2000) C49° GenBank Accession Number: I50720 (07-OCT-1997) C50° GenBank Accession Number: JC5974 (21-JAN-2000) C51° GenBank Accession Number: L02426 (27-SEP-1993) C52* GenBank Accession Number: M80776 (31-DEC-1994)

GenBank Accession Number: NM_002802 (31-OCT-2000)





[OTHER PRIOR ART TON PATENT TERATURE DOCUMENTS
Exam	Cite	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.
Initials	No.	
L 254	C55*	GenBank Accession Number: NM_003158 (31-OCT-2000)
\square 4	C56*	GenBank Accession Number: NM_003395 (15-NOV-2001)
\vdash		GenBank Accession Number: NM_003600 (01-NOV-2000)
$\vdash \vdash \vdash$	C57*	GenBank Accession Number: NM_008596 (07-JAN-2002)
	C58*	GenBank Accession Number: NM_008947 (07-JAN-2002)
	C59*	GenBank Accession Number: NM_009522 (07-JAN-2002)
$H \rightarrow$	C60.	GenBank Accession Number: NM_022925 (31-JAN-2001)
	C61*	GenBank Accession Number: NP_002793 (31-OCT-2000)
	C62*	GenBank Accession Number: NP_003149 (31-OCT-2000)
	C63.	GenBank Accession Number: NP_003386 (15-NOV-2001)
	C64*	GenBank Accession Number: NP_003591 (01-NOV-2000)
	C65*	GenBank Accession Number: NP_032622 (07-JAN-2002)
	C66*	GenBank Accession Number: NP_032973 (07-JAN-2002)
	C67*	GenBank Accession Number: NP_033548 (07-JAN-2002)
	C68*	GenBank Accession Number: NP_075214 (31-JAN-2001)
	C69°	GenBank Accession Number: O14905 (15-DEC-1998)
	C70*	GenBank Accession Number: O42280 (15-JUL-1999)
	C71*	GenBank Accession Number: 075973 (16-OCT-2001)
	C72*	GenBank Accession Number: O88992 (16-OCT-2001)
	C73*	GenBank Accession Number: P02746 (16-OCT-2001)
	C74°	GenBank Accession Number: P10108 (15-JUL-1999)
	C75*	GenBank Accession Number: P16621 (01-MAR-2002)
	C76*	GenBank Accession Number: P20488 (15-JUL-1998)
	C77*	GenBank Accession Number: P21139 (30-MAY-2000)
	C78*	GenBank Accession Number: P25098 (20-AUG-2001)
	C79*	GenBank Accession Number: P26817 (16-OCT-2001)
	C80°	GenBank Accession Number: P42280 (01-OCT-1996)
	C81°	GenBank Accession Number: P51805 (16-OCT-2001)
	C82*	GenBank Accession Number: Q90732 (01-NOV-1997)
	C83*	GenBank Accession Number: U87306 (15-MAY-1997)
	C84*	GenBank Accession Number: XM_009546 (16-OCT-2001)
	C85*	GenBank Accession Number: XM_027243 (16-OCT-2001)
	C86*	GenBank Accession Number: XP_009546 (16-OCT-2001)
	C87*	GenBank Accession Number: XP_027243 (16-OCT-2001)
	C88*	Giet and Prigent (1999). "Aurora/IpI1p-related kinases, a new oncogenic family of mitotic serine-threonine kinases." <i>J Cell Sci</i> 112(Pt 21): 3591-601.
	C89*	Hall, et al. (2000). "Axonal remodeling and synaptic differentiation in the cerebellum is regulated by WNT-7a signaling." Cell 100(5): 525-35.
\supset	C80.	Hoyle and Fisher (1996). "Genomic organization and mapping of the mouse P26s4 ATPase gene: a member of the remarkably conserved AAA gene family." <i>Genomics</i> 31(1): 115-8.





		<u> </u>					
		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS					
Exam Cite Initials No.		Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.					
C91* Kennedy and Ramachandran (2000). "Protein tyrosine phosphatase-1B in diabe Pharmacol 60(7): 877-83.		Kennedy and Ramachandran (2000). "Protein tyrosine phosphatase-1B in diabetes." Biochem Pharmacol 60(7): 877-83.					
1	C92*	Komazaki, et al. (1999). "Immunolocalization of mitsugumin29 in developing skeletal muscle and effects of the protein expressed in amphibian embryonic cells." Dev Dyn 215(2): 87-95.					
	C93.	Krueger and Saito (1992). "A human transmembrane protein-tyrosine-phosphatase, PTP zeta, is expressed in brain and has an N-terminal receptor domain homologous to carbonic anhydrases." Proc Natl Acad Sci U S A 89(16): 7417-21.					
	C94*	Kuhl, et al. (2000). "The Wnt/Ca2+ pathway: a new vertebrate Wnt signaling pathway takes shape." Trends Genet 16(7): 279-83.					
	C95*	LaBonne and Furst (1989). "Differentiation in vitro of neural precursor cells from normal and Pecanex mutant Drosophila embryos." <i>J Neurogenet</i> 5(2): 99-104.					
	C96*	LaBonne, et al. (1989). "Molecular genetics of pecanex, a maternal-effect neurogenic locus of Drosophila melanogaster that potentially encodes a large transmembrane protein." <i>Dev Biol</i> 136(1): 1-16.					
	C97*	Lue, et al. (2001). *Inflammatory repertoire of Alzheimer's disease and nondemented elderly microglia in vitro.* Glia 35(1): 72-9.					
	C98*	Minassian, et al. (1998). "Mutations in a gene encoding a novel protein tyrosine phosphatase cause progressive myoclonus epilepsy." <i>Nat Genet</i> 20(2): 171-4.					
	C99*	Murakami, et al. (2001). "Differential expression of plexin-A subfamily members in the mouse nervous system." Dev Dyn 220(3): 246-58.					
	C100*	Nishi, et al. (1999). "Abnormal features in skeletal muscle from mice lacking mitsugumin29." J Cell Biol 147(7): 1473-80.					
	C101*	Pasterkamp, et al. (1999). "Semaphorins and their receptors in olfactory axon guidance." Cell Mol Biol (Noisy-le-grand) 45(6): 763-79.					
	C102*	Powell, et al. (1997). "Development of polarity in cerebellar granule neurons:" <i>J Neurobiol</i> 32(2): 223-36.					
	C103*	Samy, et al. (1999). "Proteasome participates in the alteration of signal transduction in T and B lymphocytes following trauma-hemorrhage." <i>Biochim Biophys Acta</i> 1453(1): 92-104.					
	C104*	Severson, A. F., D. R. Hamill, et al. (2000). "The aurora-related kinase AIR-2 recruits ZEN-4/CeMKLP1 to the mitotic spindle at metaphase and is required for cytokinesis." Curr Biol 10(19): 1162-71.					
	C105*	Shimuta, et al. (1998). "Structure and expression of mitsugumin29 gene." FEBS Lett 431(2): 263-7.					
	C106*	SWALL (SPTR) Accession Number: 008722 (1-JUL-1997).					
	C107*	SWALL (SPTR) Accession Number: 008747 (1-JUL-1997).					
	C108*	SWALL (SPTR) Accession Number: 060445 (1-AUG-1998).					
	C109*	SWALL (SPTR) Accession Number: 088488 (1-NOV-1998).					
	C110*	SWALL (SPTR) Accession Number: 095185 (1-MAY-1999).					
	C111*	SWALL (SPTR) Accession Number: P49014 (01-JUN-1994).					
	C112*	SWALL (SPTR) Accession Number: P70206 (1-FEB-1997).					
	C113*	SWALL (SPTR) Accession Number: P70208 (1-FEB-1997).					
	C114*	SWALL (SPTR) Accession Number: Q13358 (1-NOV-1996).					
	C115*	SWALL (SPTR) Accession Number: Q91823 (1-NOV-1996).					
	C116*	SWALL (SPTR) Accession Number: Q99LL8 (1-JUN-2001).					
0	C117*	SWALL (SPTR) Accession Number: Q99MK8 (1-JUN-2001).					
\bigcirc	C118*	SWALL (SPTR) Accession Number: Q9D398 (1-JUN-2001).					



Express Mail No. EV074976-75US Date of Deposit: May 21, 2002

OIPE VOZO

CHATENIN HERATURE DOCUMENTS OTHER PRIOR ART Exam Cite No. Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc. C119' SWALL (SPTR) Accession Number: Q9ESN4 (16-OCT-2001). C120* SWALL (SPTR) Accession Number: Q9NTJ4 (1-OCT-2000). C121* SWALL (SPTR) Accession Number: Q9QYC1 (1-MAY-2000). SWALL (SPTR) Accession Number: Q9UIW2 (1-MAY-2000). C122' C123* SWALL (SPTR) Accession Number: Q9UL64 (1-MAY-2000). C124* Takeshima, et al. (1998). "Mitsugumin29, a novel synaptophysin family member from the triad junction in skeletal muscle." Biochem J 331(Pt 1): 317-22. C125° Tamagnone, et al. (1999). "Plexins are a large family of receptors for transmembrane, secreted, and GPI-anchored semaphorins in vertebrates." Cell 99(1): 71-80. C126* Tanahashi, et al. (1998). "Chromosomal localization and immunological analysis of a family of human 26S proteasomal ATPases." Biochem Biophys Res Commun 243(1): 229-32. Tappia, et al. (1993). "Regulation of an hepatic low-M(r) membrane-associated protein-tyrosine C127* phosphatase." Biochem J 292(Pt 1): 1-5. C128* Thomas, et al. (1994). "GLEPP1, a renal glomerular epithelial cell (podocyte) membrane proteintyrosine phosphatase. Identification, molecular cloning, and characterization in rabbit." J Biol Chem 269(31): 19953-62. C1291 Vite, et al. (2001), "Histopathology, electrodiagnostic testing, and magnetic resonance imaging show significant peripheral and central nervous system myelin abnormalities in the cat model of alphamannosidosis." J Neuropathol Exp Neurol 60(8): 817-28. C130° Wootton and Federhen (1996). "Analysis of compositionally biased regions in sequence databases." Methods Enzymol 266: 554-71. C131* Wright, et al. (1998). "Proliferating and migrating mesangial cells responding to injury express a novel receptor protein-tyrosine phosphatase in experimental mesangial proliferative glomerulonephritis." J Biol Chem 273(37): 23929-37. C132* Zelivianski, et al. (2000). "Expression of receptor protein tyrosine phosphatase alpha mRNA in human prostate cancer cell lines." Mol Cell Biochem 208(1-2): 11-8. C133* Zmuda and Rivas (1998). "The Golgi apparatus and the centrosome are localized to the sites of newly emerging axons in cerebellar granule neurons in vitro." Cell Motil Cytoskeleton 41(1): 18-38. C134° Ackerman, et al. (1997). "The mouse rostral cerebellar malformation gene encodes an UNC-5-like protein." Nature 386(6627): 838-42. C135° Sen, et al. (1997). "A putative serine/threonine kinase encoding gene BTAK on chromosome 20q13 is amplified and overexpressed in human breast cancer cell lines." Oncogene 14(18): 2195-200. C136* Shindo, et al. (1998). "cDNA cloning, expression, subcellular localization, and chromosomal assignment of mammalian aurora homologues, aurora-related kinase (ARK) 1 and 2." Biochem Biophys Res Commun 244(1): 285-92. C137* Zhou, et al. (1998). "Tumour amplified kinase STK15/BTAK induces centrosome amplification,

* a copy of this reference is not provided as it was previously cited by or submitted to the office in a prior application, Serial No. 09/995,514 filed November 28, 2001, and relied upon for an earlier filing date under 35 U.S.C. §120 (continuation, continuation-in-part) and divisional applications).

aneuploidy and transformation." Nat Genet 20(2): 189-93.

Examiner Signature		Date Considered	5/17/05

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.